

# Etienne Meunier

Rennes, France  
DoB : 23/08/1996

etienne.meunier@inria.fr  
<https://github.com/Etienne-Meunier/>

## Education:

<b>Sept. 2020</b> <b>Nov. 2023</b>	<b>PhD in Computer Science, Inria Rennes - France</b> <i>Deep Learning for unsupervised visual saliency detection in image sequences.</i> Reference : Patrick Bouthemy - <a href="mailto:patrick.bouthemy@inria.fr">patrick.bouthemy@inria.fr</a> <ul style="list-style-type: none"><li>• Published several works in international peer-reviewed issues</li><li>• Implemented and released open source implementation of our works</li><li>• Supervised two master-level interns working on satellite image analysis</li></ul>
<b>Jan. 2019</b> <b>Sept. 2019</b>	<b>Master of Science, Boston University - United States</b> <i>Concentration in Computer Information Systems - GPA : 3.96/4.</i> <i>Sub-concentration in Data Analytics</i> <ul style="list-style-type: none"><li>• Advanced Machine Learning</li><li>• Research project comparing Generative Networks and Evolutionary Approaches</li></ul>
<b>Sept. 2014</b> <b>Dec. 2018</b>	<b>Diplôme d'ingénieur, ECE Paris - France</b> <i>Concentration in Computer Science - Top 5% overall ranking</i> <ul style="list-style-type: none"><li>• Mathematics, Programming, Electronics, Robotics, Data science</li></ul>
<b>July 2016</b> <b>Dec. 2016</b>	<b>University of Newcastle - Australia</b> <ul style="list-style-type: none"><li>• Software Engineering, Operating Systems</li></ul>

## Peer-reviewed publications:

<b>CVPR</b> <b>2023</b> <i>Highlight</i>	<b>Unsupervised space-time network for temporally-consistent segmentation of multiple motions</b> <i>Meunier. E &amp; Bouthemy P.</i>
<b>TPAMI</b> <b>2023</b>	<b>EM-driven unsupervised learning for motion segmentation</b> <i>Meunier E., Badoual A.. &amp; Bouthemy P.</i>
<b>BMVC</b> <b>2021</b>	<b>Unsupervised computation of salient motion maps from the interpretation of a frame-based classification network</b> <i>Meunier. E &amp; Bouthemy P.</i>
<b>MLCB</b> <b>2019</b>	<b>Interpreting deep learning models in genomics using genetic algorithm</b> <i>Meunier E., Novakovsky G. &amp; Mostafavi S.</i>

## Oral Presentations:

- Presentation, MIA 2023 - Berlin, Germany**  
*EM-driven network for efficient unsupervised motion segmentation, Meunier E., Badoual A.. & Bouthemy P.*
- Presentation, ImmGen Consortium 2019 - Harvard University - Boston, United States**  
*AI-TAC and DNA sequence generation. Maslova S. & Meunier E.*
- Poster, Official Opening of the New Met College Building 2018 - Boston, United States**  
*A Simple Comput. Approach to Predict Long Term Hourly Electric Consumpt.. Meunier E., Moreau P. & Pinsky E.*

## Teaching :

<b>Sept. 2021</b> <b>Sept. 2022</b>	<b>Research Methods in Computer Vision, EFREI - Paris, France</b> <i>Master Level, lecturer for 40+ students.</i> <ul style="list-style-type: none"><li>• Understanding mathematical reasoning and implementation of recent CV papers.</li></ul>
<b>Sept. 2022</b> <b>Dec. 2022</b>	<b>Machine Learning, EFREI - Paris, France</b> <i>Master Level, teaching assistant</i>

## Practical and professional experience:

<b>Sept. 2019</b> <b>Aug. 2020</b>	<b>Visiting Scholar, University of British Columbia, Mostafavi Lab - Canada</b> <i>Research at the Mostafavi lab focuses on developing computational and statistical approaches for integrating and interpreting diverse types of genomics data.</i> Reference : Sara Mostafavi - <a href="mailto:saramos@cs.washington.edu">saramos@cs.washington.edu</a> <ul style="list-style-type: none"><li>• Trained Auto-Encoders to build embeddings of DNA sequences based on a regression target variable.</li><li>• Developed evolutionary approaches to generate sequences conditioned by the activation of a Convolutional Neural Network.</li></ul>
<b>Dec. 2018</b> <b>Sept. 2019</b>	<b>Freelance IT consultant, Seelk - France</b> <i>Seelk is a company that uses data analytics to help companies to develop their sales on the Internet.</i> <ul style="list-style-type: none"><li>• Developed analytical tools to give insights to companies on how web markets are building rankings and evaluate the impact of business decisions.</li></ul>
<b>May. 2018</b> <b>Aug. 2018</b>	<b>Researcher Intern, Centre de Ressources et d'Appui sur le Risque Requin - La Reunion</b> Supervisor : Eric Chateaubinois, COO <i>The CRA is an organization created by the French Government to lead research on innovative solutions to reduce the risk of shark attacks on La Reunion Island (Indian Ocean).</i> <u>During Internship :</u> <ul style="list-style-type: none"><li>• Reduced by 10x the amount of videos to watch for biologists by developing a motion detection algorithm that works on underwater videos using several tracking techniques.</li></ul> <u>As a consultant (Sept. 2018 - Aug. 2019) :</u> <ul style="list-style-type: none"><li>• Leading the development of shark detection algorithm using a deep learning approach.</li></ul>
<b>June 2017</b> <b>Aug. 2017</b>	<b>Data Engineer Intern, Datamaran - England</b> Supervisor : Alberto Pacheco, Data Engineer <i>Datamaran is a London-based business intelligence provider that uses data analysis and IA to help businesses to monitor emerging regulatory and reputational risks.</i> <ul style="list-style-type: none"><li>• Integrated 10k+ financial reports into the database, by developing a process that extracts, preprocesses and stores data automatically from selected web sources.</li><li>• Started a research project aimed to use machine learning techniques to extract opinions on companies from tweets.</li></ul>
<b>April 2016</b> <b>May 2016</b>	<b>Internship, Zodiac Aerospace - France</b> Supervisor: David Vicart, Production Manager <i>Zodiac Aerospace designs high-technology equipment and systems for critical aircraft functions and in-flight and on-ground safety.</i> <ul style="list-style-type: none"><li>• Improved by 5x technicians speed to access internal documentation by developing a program that automates research in scanned technical documents using Visual Basic.</li></ul>

## Personal Projects:

<b>Nov. 2016</b> <b>Sept. 2018</b>	<b>Leader of project Kolibri which offers transportation solutions to independent producers</b> <i>Kolibri is a project aimed to offer alternative transportation solutions to french independent producers and use cost evaluation techniques to give them insights on their choice.</i> <ul style="list-style-type: none"><li>• Selected as one of 110 projects to be part of the plan to promote innovative initiatives financed by the city of Paris.</li></ul>
---------------------------------------	--

## Personal Achievements:

<b>Jan. 2018</b> <b>Feb. 2018</b>	<b>4L Trophy</b> <i>Humanitarian car race between Paris and southern Morocco.</i> <ul style="list-style-type: none"><li>• Bought, repaired and prepared an old Renault R4 for several months for a race in the Sahara desert.</li><li>• Collaborated with companies to raise money and donated bags of school supplies to Moroccan children.</li></ul>
--------------------------------------	---